



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/521,685

01/18/2005

Junichi Oka

10921.0270USWO

2163

52835

7590

10/20/2009

HAMRE, SCHUMANN, MUELLER & LARSON, P.C.

P.O. BOX 2902

MINNEAPOLIS, MN 55402-0902

EXAMINER

WRIGHT, PATRICIA KATHRYN

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

10/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,685	Applicant(s) OKA, JUNICHI	
	Examiner P. Kathryn Wright	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-12 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-12 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/6/2009;5/28/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 18, 2009 has been entered.

Status of the Claims

2. This action is in response to papers filed August 18, 2009 in which claims 1, 6, 10-12, 14, 15 and 16 were amended and claim 13 was canceled. The amendments have been thoroughly reviewed and entered. Any objection/rejection not repeated herein has been withdrawn.

Claims 1, 3-6, 8-12, and 14-17 are under prosecution.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The original specification does not recite a "guide recess". However, the specification does support a "guide portion" 32. Appropriate correction is required.

The rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that

Art Unit: 1797

the meaning of the terms in the claims may be ascertainable by reference to the description.” 37 CFR 1.75(d)(1).

As Applicant appreciates, the terminology of the original claims follows the nomenclature of the specification, but sometimes in amending the claims or in adding new claims, new terms are introduced that do not appear in the specification. **The use of a confusing variety of terms for the same thing should not be permitted.** New claims and amendments to the claims already in the application should be scrutinized not only for new matter but also for **new terminology**. While an applicant is not limited to the nomenclature used in the application as filed, he or she should make appropriate amendment of the specification whenever this nomenclature is departed from by amendment of the claims so as to have **clear support or antecedent basis in the specification for the new terms appearing in the claims**. This is necessary in order to insure certainty in construing the claims in the light of the specification. See 37 CFR 1.75, MPEP §608.01(i) and § 1302.01. Note that examiners are to ensure that the terms and phrases used in claims presented late in prosecution of the application find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description, see 37 CFR 1.75(d)(1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 3-6, 8-12, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vandenberg et al., (US Patent No. 3,709,598), hereinafter "Vandenberg" in view of Bottwein et al., (US Patent No. 6,534,017), hereinafter "Bottwein".

Vandenberg teaches an analyzing device, comprising:

a rotating body 24 for transferring a target analyte 25; and

an optical detector 88 for optically analyzing the target analyte.

Vandenberg also teaches the rotating body for holding the target analyte by applying a negative pressure to the target analyte while transferring the target analyte in a circumferential direction of the rotating body.

The rotating body of Vandenberg including an inner space (chamber) for negative pressure application, a plurality of positioning recesses (grooves 28), each for placing and holding the target analyte, and through-holes 30 for connecting the positioning recesses and the inner space (see entire document, in particular col. 7, lines 36 et seq.)

Vandenberg teaches the inner space accommodating a blockade member 60 for selectively closing or opening the through-holes by movement relative to the rotating body in clockwise direction.

Vandenberg further teaches removing the target analyte held on the positioning recess via pressurized air from passages 67, 68; however, Vandenberg does not disclose using a blade that is inserted into between the target analyte and a bottom of the positioning recess for removing the target analyte held on the positioning recess. Nor does Vandenberg disclose a guide recess located between each two adjacent positioning recesses for allowing the blade to move relative to the rotating body (claim 14).

Like Vandenberg, Bottwein teaches a rotating body 40 for transferring a plurality of target analytes 1 and a plurality of positioning recesses (i.e., grooves 41 located 180 degrees from each other, see Figs. 8A-E) sized to receive the target analytes. Bottwein also uses a blade (reads on rake or hook 100) that is inserted between the target analyte and a bottom of the positioning recess 41 for removing the target analyte held on the positioning recess (see Fig. 10). Bottwein teaches a guide recess 42 located between each two adjacent positioning recesses for allowing the blade to move relative to the rotating body, as shown in Figs. 9-10.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to have substituted the pressurized means of removing the analytes from the recess of the rotating body taught by Vandenberg with the blade and guide recess of Bottwein since this would eliminate the need for additional passages in

the rotating body dedicated to pressurized air supply, thereby, simplifying the design of the Vandenberg analyzing device.

As to claim 3, Vandenberg teaches a negative pressure generator (suction device) for applying the negative pressure to the inner space (see col. 7, line 36 et seq.)

Regarding claim 4, Vandenberg teaches the rotating body includes a rotary axis extending insubstantially horizontal direction as see in Fig. 2. Note the vertical and horizontal directions of the device have not been positively recited or related to other elements of the device.

With respect to claims 5 and 6, the rotating body of Vandenberg is formed as a cylinder having an outer surface formed with the positioning recesses (grooves 28) that extend in an axial direction of the rotating body and are spaced from each other in a circumferential direction of the rotating body (see Fig. 3).

As to claim 8, Vandenberg teaches the blockade member extends in an axial direction of the rotating body and is formed with a cutout extending in the axial direction (see Fig. 3).

With respect to claim 9, Vandenberg teaching a housing 25 for accommodating at least a part of the rotating body, wherein one end of the blockade member is non-rotatably supported by the housing (see Fig. 3).

Regarding claim 10, the blockade member of Vandenberg is opened to the through-hole connected to the positioning recess on which the target analyte is placed at the optical detector 88.

As to claims 11 and 12 are directed to the operation of the device. Apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. The manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art apparatus teaches all of the structural limitations of the claim (see MPEP § 2114 & § 2173.05(g)). Nevertheless, the target analyte of Vandenberg is transferred by rotating the rotating body clockwise 180 degrees from a load position 19 to a reject position, see Fig. 3. The target analyte is transferred from a position at which the target analyte is placed at the positioning recess to the position for measurement by the optical detector 88. The blockade member closes the through-hole connected to the positioning recess at a position where the target analyte is placed on the positioning recess, thereby preventing the target analyte from being subjected to the negative pressure at rejection position 66.

Regarding claim 15, Vandenberg teaches a suction applying clearance (area between rollers 26) provided between positioning recess (groove 28) and the through-hole 30 connected to the positioning recess. The suction applying clearance applying the negative pressure on the target analyte in an area extending in an axial direction of the rotating body.

With respect to claim 16, wherein the suction applying clearance of Vandenberg is formed by a recess smaller than each positioning recess adjacent to a disposing portion and closer to an axis of the rotating body (see Fig. 3).

Regarding claim 17, note that the recited target analyte is not considered as part of the claimed structure of the analyzing device and is therefore not given patentable

Art Unit: 1797

weight. For apparatus claims, if the prior art structure is capable of performing the intended use, then it meets the claim. Apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. See MPEP § 2114 & § 2173.05(g).

Response to Arguments

7. Applicant's arguments filed August 18, 2009 have been fully considered but they are not persuasive.

Applicant argues the Final rejection, mailed March 04, 2009, is improper because the features added to independent claim 1 were previously presented for examination and cannot be said to be necessitated by a claim amendment or an Information Disclosure statement.

The Examiner respectfully disagrees. The claims presented by Applicant in the Response filed February 06, 2009 presented new grounds for rejection, namely the introduction of an optical detector and the positive recitations to the rotating body. Thus, Applicant's amendment necessitated the new grounds for rejection. It is not improper to make a second action final where the action introduces a new ground of rejection on newly cited art in response to the amendment that is not expected by the Examiner. The amendment to the claims cannot be said to be reasonably expected by the Office. Further, the instant application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, therefore, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

In response to the previous rejection of claims 13 and 14 under 35 U.S.C. 103(a) as being unpatentable over Vandenberg (US Patent No. 3,709,598) in view of Kazuhiko Tanzawa (JP 06/323997), Applicant argues Vandenberg teaches a device that includes a pressurized means for removing the capsules, instead of a device that makes direct contact with the capsules. In contrast, the discharge guide taught in Tanzawa makes direct contact with the test tools. Thus, Applicant concludes replacing the pressurized means of Vandenberg's device with the discharge guide taught in Tanzawa would cause the discharge guide to directly "hook the ends" of the capsules. Applicant presumes such direct contact would likely cause defects and imperfections on the capsules. Applicant asserts that Vandenberg requires that the capsules "must be as free as possible of imperfections" (column 1, line 31). Thus, combining the discharge guide of Tanzawa with the device according to Vandenberg would allegedly render Vandenberg's device from working as originally intended.

The Examiner notes that the previous rejection of claims 13 and 14 under 35 U.S.C. 103(a) as being unpatentable over Vandenberg in view of Tanzawa is moot in view of the new ground of rejection, however it is noted that Applicant argues Vandenberg does not include a pressurized means for transferring capsules because such direct contact would likely cause defects and imperfections to the capsules. The Examiner respectfully disagrees. Instead, Vandenberg teaches it has been found especially difficult to inspect for defects in the rounded shoulder areas at the ends of the capsules, between the generally straight edges and the rounded ends, and especially in the parabolic surfaces of capsules having parabolic body ends. The Vandenberg's

Art Unit: 1797

invention provides an effective optical system for inspecting capsules presented in succession in a uniform position and orientation and rapidly spun on their axis to present their entire surface for such optical inspection. It provides for inspecting not only the generally cylindrical side surfaces of capsules, but also the rounded ends and the shoulder portions between the sides and ends, so that a complete inspection may be accomplished in a single inspection cycle at the same inspection station (see col. 1, lines 17-col. 2, line 55). Vandenberg does not teach the use of the pressurized means for transferring capsules is necessary because direct contact would likely cause defects and imperfections to the capsules. In fact, Vandenberg teaches prior to inspection, a capsule handling and feeding machine (i.e., hopper, agitating bar, etc.) that directly contacts the capsules. Therefore, contrary to Applicant's assertion, direct contact to the target analytes of Vandenberg are not likely to cause defects and imperfections to the capsules and it would be obvious to the skilled artisan to combine the pressurized analyte transfer mechanism of Vandenberg with the mechanical removal means of Bottwein since this would eliminate the need for additional passages in the rotating body dedicated to pressurized air supply, thereby, simplifying the design of the analyzing device.

Thus, for the reasons delineated above, the claims remain rejected over the prior art.

Conclusion

8. No claims are allowed.

Art Unit: 1797

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Wright whose telephone number is (571)272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. Kathryn Wright/
Examiner, Art Unit 1797